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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/643,606  | 08/18/2003  | Rene Mattern         | FA1093USNA          | 4930             |
| 23906 7590 08/02/2007 E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1128 4417 LANCASTER PIKE WILMINGTON, DE 19805 |             |                      | EXAMINER            |                  |
|   |             |                      | SELLMAN, CACHET I   |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 1762                |                  |
|   |             |                      |                     | DEL HICRY MODE   |
|   |             |                      | MAIL DATE           | DELIVERY MODE    |
|   | •           |                      | 08/02/2007          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Advisory Action Before the Filing of an Appeal Brief

| Application No.   | Applicant(s)   |
|-------------------|----------------|
| 10/643,606        | MATTERN ET AL. |
| Examiner          | Art Unit       |
| Cachet I. Sellman | 1762           |

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --THE REPLY FILED 16 July 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. 1. 

The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods: The period for reply expires.\_\_\_\_\_months from the mailing date of the final rejection. b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL 2. The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a). **AMENDMENTS** 3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because (a) They raise new issues that would require further consideration and/or search (see NOTE below): (b) They raise the issue of new matter (see NOTE below); (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or (d) They present additional claims without canceling a corresponding number of finally rejected claims. NOTE: . (See 37 CFR 1.116 and 41.33(a)). 4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324). 5. Applicant's reply has overcome the following rejection(s): 6. Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s). 7. For purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows: Claim(s) allowed: Claim(s) objected to: Claim(s) rejected: Claim(s) withdrawn from consideration: \_\_\_\_\_ AFFIDAVIT OR OTHER EVIDENCE 8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e). 9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1). 10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached. REQUEST FOR RECONSIDERATION/OTHER 11. X The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attachment. 12. Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). 13. Other: \_\_\_\_.

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## Response to Arguments

1. Applicant's arguments filed 7/16/2007 have been fully considered but they are not persuasive. The applicant argues that the Examiner has not met the burden of providing prima facie obviousness because the Emch reference does not teach all of the limitations of the independent claim and "does not recognize the problem that Applicants have solved. Applicants, by their process, have formed high-quality coatings that preclude air-entrapment in the powder coating...improves gloss, appearance, impact and flex of the resultant coating" (page 6 of arguments). The Applicant further states that Emch "does not restrict the radiation to the primary NIR range of 750-1200nm by using filters, nor does Emch recognize the problems that occur when curing without restring" (page 6 of Arguments). The Examiner disagrees that Emch does not address the problem of air entrapment, Emch [0005] states "while hot air treatment is rapid, a skin can form on the surface of the coating which impedes the escape of volatiles and entrapped air form the coating composition and causes pops, bubbles, or blisters which ruin the appearance of the dried coating" therefore Emch does recognize the problem of air entrapment.

The Examiner agrees that Emch does not teach restricting the NIR rage to 750
. 1200nm as noted in the previous office action dated 5/16/2007; however, that is why the
Rekowski et al. reference was used to show how that by using a narrower range of NIR
radiation unlike the wider range in Emch the coating can be cured rapidly and with good
surface quality (appearance) [abstract, 0007]. Emch and Rekowski et al. are both
addressing the problem of rapidly curing the coating using NIR radiation as well as

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achieving good surface quality (appearance). When combing the two references one would seek a way to modify the process of Emch to use a shorter wavelength as taught by Rekowski et al.

Crane teaches a glass that can be used with a tungsten lamp or other high temperature light source (abstract), which is the same light source used in Emch [0044] therefore there is motivation to use the glass of Crane in Emch to restrict the wavelength 760-2500nm.

One would further seek a source to further limit the wavelength to 750-1200nm as taught by Rekowski et al. to achieve the rapid curing and good appearance. Anzai et al. teaches a discharge lamp with a filter which allows for near infrared to pass through having greater than 80% transmission in the range of 750-100nm where the filter is coated with molybdenum oxide, chromium oxide, etc (col. 3,lines 25-64) therefore one would modify the lamp of Emch having the glass of Crane to include the filter of Anazi et al. in order to achieve the desired wavelength taught by Rekowski et al. to get the rapid curing and good appearance.

As shown above there is motivation to combine the reference and all the limitations of claim 1 are taught:

Emch teaches applying powder coating to a substrate [abstract] and irradiating the coating with NIR radiation where emitters that emit in the range of (750-4000nm) are used [0044] (the ranges overlap those of the claimed range of 250-5500)

Crane teaches glass having wavelength of 760-2500nm (col. 5, lines 8-17)

Anazi et al. teaches glass-coated filters having transmission primarily (80%) in the range of 750-1000nm (col. 3,lines 25-64) which overlaps that of the claimed range 750-1200nm.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cachet I. Sellman whose telephone number is 571-272-0691. The examiner can normally be reached on Monday through Friday, 7:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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## /William Phillip Fletcher III/ Primary Examiner

July 31, 2007